ceiling panel of claim 14 and the plurality of plank elements in claim 17 must be shown in the drawings. In response to the Official Action, Applicants are submitting corrected drawings showing the elements. The drawings do not contain new matter since the elements are clearly described on page 4, lines 19-22, and the claims clearly provide sufficient support to amend the drawings.

### REMARKS

Claims 1-19 are currently pending. Independent claims 1, 14 and 17 have been amended to recite that the claimed cable anchored to the main beam is "electrifiable." Furthermore, claim 8 has been amended to alleviate the claim rejections under 35 U.S.C. § 112, second paragraph.

### Claim Rejections Under 35 U.S.C. § 112

Claim 8 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the PTO states that the limitation of the truss cable in line 3 and the first cable truss in line 6 lack sufficient antecedent basis. Applicants have amended claim 8 such that the term "truss" has been removed and instead in the first instance the word "first" has been inserted such that proper antecedent basis is now found in claim 1 wherein the cable is referred to as a "first electrifiable cable."

## Claim Rejections Under 35 U.S.C. § 102(b)

The PTO has rejected claims 1, 2, 3, and 12 under 35 U.S.C. § 102(b) as being anticipated by GB 2,174,430A (*Perrin*). The PTO states that *Perrin* discloses a beam for use

in buildings wherein the beam includes a main beam, at least a first standoff, and a first cable anchored to the main beam near the ends of the main beam and extending over.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131 quoting <u>Verolegaal Bros. v. Union Oil Co. of California</u>, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicants respectfully contend that *Perrin* does not disclose each and every element as recited in the instant application. Specifically, *Perrin* fails to disclose a first cable as recited in the instant application. While the PTO refers to the bracing strut 30 as a cable being disclosed in *Perrin*, Applicants respectfully point out that the bracing strut recited in *Perrin* is formed from welded steel tubing connected to the main beam section by means of bolts passing through the suitable pipe bushes at the end of the various bracing portions.

Lines 109-114. Thus, *Perrin* does not teach a cable as claimed in the instant application.

Instead, this reference merely teaches a tubular stock formed from a welded steel tubing of a bracing strut for roofing truss. *Perrin* fails to teach the claim element of a cable anchored to the main beam as claimed in the present application. Applicants thus assert that claims 1, 2, 3, and 12 are not anticipate by *Perrin* since this reference fails to teach or suggest the claim limitations of a cable anchored to the main beam as claimed in the present application.

Furthermore, Applicants have amended the present claim set to include that the cable is electrifiable. *Perrin* fails to teach or suggest the electrification of the tubular stock strut. Additionally, the tubular stock or welded steel tube taught in *Perrin* is most likely not electrifiable as in the sense used in the present application.

# Claim Rejections Under 35 U.S.C. § 103(a)

The remaining claims 4-11 and 13-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Perrin* in view of either U.S. Patent No. 5,025,357 to *Maurer*, U.S. Patent No. 4,109,305 to *Claussen et al.*, and in view of U.S. Patent No. 6,079,177 to *Halchuck*.

To support a conclusion of obviousness, "either the references must expressly or impliedly suggest the claimed combination or the [PTO] must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Int. 1985). In evaluating obviousness, the Federal Circuit made it very clear that one must look to see if "the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have had a reasonable likelihood of success viewed in light of the prior art." *In re Dow Chemical Co. v. American Cyanamid Co.*, 837 F.2d 469, 473, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988). Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure." *Id.* 

Specifically, claims 4, 5, 7, 8 and 9 are said to be obvious since *Maurer* discloses a lamp attached to a cable in light of *Perrin*, which does not disclose a low voltage light fixture. As previously discussed, *Perrin* teaches a steel tubing truss. *Maurer* discloses lamps suspended from flexible wires. Col. 2, Lns. 20-22. *Perrin* fails to teach or suggest an electrifiable cable support as claimed in the present application and *Maurer* teaches only the attachment of lamps to conductive wires. The cited art fails to suggest or motivate one to modify the steel tubing in struts to wires and then electrify such to attach lamps such as those disclosed in *Maurer*. The only motivation to do so is found in Applicants' application.

Claims 13, 14, and 16-19 are said to be rendered obvious in view of Claussen et al. which teaches a main beam further supporting a plurality of ceiling panels. The PTO states that it would have been obvious to one of ordinary skill in the art to add the ceiling panels of

Claussen et al. to the structure of Perrin for forming a ceiling in a room. Furthermore, Claussen et al. is said to disclose a lamp attached to a cable. Regarding claim 15, the PTO states that such would be unpatentable over Perrin and Claussen et al. further in view of Halchuck which teaches a ceiling panel comprising fiberglass. Applicants again note that the only motivation for modifying the cited references can only be found in Applicants application. The cited art fails to teach or suggest a ceiling element having an electrifiable cable as part of a ceiling truss as claimed in the present application.

The remaining claims 6 and 11 are said by the PTO to be unpatentable over *Perrin* because it would have been obvious to one of ordinary skill in the art to provide a second cable as recited in claim 6, and the making of a main beam 12 feet long is said to be considered an obvious variation on a design. As stated earlier, *Perrin* does not teach or suggest an electrifiable cable anchored to a main beam as claimed in the present application. One of ordinary skill in the art would not have been motivated to add a second cable to that taught in *Perrin* since *Perrin* does not even teach or suggest adding a first cable.

Additionally, *Perrin* fails to teach or suggest that a cable can be electrifiable as recited in the newly amended claims.

Thus, Applicants respectfully contend that claims 4-11 and 13-19 are not rendered obvious under 35 U.S.C. § 103(a) over *Perrin* in view of either *Maurer*, *Claussen et al.*, or *Halchuck* since the cited art fails to teach or suggest an electrifiable cable attached to the main beam as claimed in the newly amended claims.

Thus, Applicants respectfully submit that claims 1-19 of the present application are believed to be in a condition for allowance and an early notice to such effect is earnestly solicited.

12/19/22

Date

Respectfully submitted,

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Cheryl West

## APPENDIX

## **IN THE SPECIFICATION**

place the paragraph beginning on page 4, line 19, through page 5, line 5, with the following paragraph:

Traditional cross tees 600 extend between the main beams to form openings. Ceiling tiles 650 are mounted in the openings in the traditional way to form the ceiling plane. Alternatively, long, narrow ceiling panels 650 (commonly referred to as planks which are typically 12 inches wide and vary in length from 2 feet to 8 feet) can be used to span between the cable trusses and the perimeter walls of the modular office spaces. With the truss cables of adjacent main beams provided with low voltage electrical power, low voltage lighting is easily configurable and reconfiguration.

g them at another location.

Page 6, after line 3, insert the following paragraph:

Figure 6 illustrates a ceiling system having cross tees and ceiling panels or planks

orid formed by the intersection of their cross tees and main beams. fixtures can be attached between adjacent truss cables to provide desired lighting. The lighting is easily configurable and reconfigurable simply by detaching the fixtures and attaching them at another location.

placed within a grid formed by the intersection of their cross tees and main beams.

- 1. (Amended) A suspended ceiling element comprising:
- a main beam;
- at least a first standoff connected to and projecting from the main beam; and
- a first electrifiable cable anchored to the main beam near the ends of the main beam and extending over the standoff, the cable substantially spanning the length of and providing support to the main beam.

8. (Amended) The element of claim 1, wherein the element includes a second standoff connected to and projecting from the main beam, the first and second standoffs being spaced apart, the [truss] <u>first</u> cable extending over the first and the second standoff;

wherein a second <u>electrifiable</u> cable is attached to the first and the second standoffs and is substantially parallel to the first cable [truss], and electrically isolated from the first cable; and

wherein a lamp is attached to the first and the second substantially parallel cables.

- 14. (Amended) A ceiling system comprising:
  - (a) a plurality of cable truss assemblies, each assembly including,
    - (1) a main beam,
    - (2) at least one standoff support connected to and projecting from the main beam, and
    - (3) [a] an electrifiable cable in communication with the standoff and substantially spanning the length of the main beam;
  - (b) a plurality of cross beams running substantially perpendicular to and in communication with the main beam to form a grid; and
  - (c) a ceiling panel supported by the grid.
- 17. (Amended) A ceiling system comprising:
  - (a) a plurality of cable truss assemblies, each assembly including,
    - (1) a main beam,
    - (2) at least one standoff support connected to and projecting from the main beam, and

- (3) [a] an electrifiable cable in communication with the standoff and substantially spanning the length of the main beam; and
- (b) a plurality of plank elements spanning between the main beams.